IVLEVA, I.V.

Biological principles of raising white enchytraeids (Enchytraeus albidus) for market. Trudy probl. i tem. sov. no.7:84-88 '57.
(Enchytraeidae) (Fishes--Food) (MLRA 10:4)

IVLEVA, I.V.

Respiration of Enchytraeus albidus Henle. Zool.zhur. 39 no.2:165-175 F '60. (MIRA 13:6)

1. Laboratory of Hydrobiology, All-Union Research Institute of Lake and River Fishery Management, Leningrad.
(Oligochaeta) (Respiration)

IVLEVA, I.V.

Heat resistance of the muscle tissue in polychaetes of the Mediterranean basin. Zool. zhur. 41 no.12:1798-1810 D '62. (MIRA 16:3)

1. Sebastopol Biological Station of the Academy of Sciences of the Ukrainian S.S.R.
(Mediterranean Sea--Polychaeta) (Black Sea--Polychaeta)
(Heat--Physiological effect)

TRAPEZNIKOV, A.A.; CHUPEYEV, M.A.; Prinimala uchastiye: IVLEVA, L.D.

Effect of surface-active agents on the characteristics of paint systems. Lakokras.mat.i ikh prim. no.5:17-24 '62. (MIRA 16:1)

1. Institut fizicheskoy khimii AN SSSR i Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut lakokrasochnoy promyshlennosti.
(Paint) (Surface-active agents)

CHUPEYEV, M.A.; MUKHANOVA, V.S.; MARKOVSKAYA, M.N.; BOLOKHINA, S.S.; IVLEVA, L.D.

Use of surface-active agents in the grinding of carbon black in alkyd binding substances. Lakokras. mat. i ikh prim. no.3:77-78 '63. (MIRA 16:9)

(Paint) (Carbon black) (Surface-active agents)

DULOVA, V.I.; IVLEVA, L.P.

Strength of acids in esters. Uzb.khim.zhur. 6 no.2:28-35 '62. (MIRA 15:7)

1. Tashkentskiy gosudarstvennyy universitet imeni V.I. Lenina.
(Acids) (Esters)

VOLOGDIN, I.V.; IVLEVA, M.K.

Increasing the productivity in welding pipelines. Biul.tekh. inform.po stroi. 5 no.9:17-19 S '59. (MIRA 12:12)
(Gas pipes--Welding)

BARON, Lazar Izrailevich; VLASOV, Orest Yevgen'yevich; SMIRNOV, Sergey Anatol'yevich; TERMETCHIKOV, Marat Karimovich; LEDOVSKAYA, V.V., otv. red.; IVLEVA, N.P., red.; BERESLAVSKAYA, L.Sh., tekhn. red.; GALANOVA, V.V., tekhn. red.

[Effect of the shape of the blasting charge on the results of the explosion] Vliianie formy zariada vybrosa na rezul'tat vzryva. Moskva, TSentr.in-t tekhn.informatsii ugol'noi promyshl., 1959. 15 p. (MIRA 15:1)
(Blasting)

BARON, Lazar' Izrailevich, prof., doktor tekhn. nauk; TIKHOMIROVA, Vera Ivanovna, inzh.; LEDOVSKAYA, V.V., otv. red.; IVLEVA, N.P., red.; SHKLYAR, S.Ya., tekhn. red.

[Statistical analysis of indices of large-scale blasts of vertical borehole charges in open-pit mines] Opyt statisticheskogo analiza pokazatelei massovykh vzryvov vertikal'nykh skvazhinnykh zariadov v kar'erakh. Moskva, M-vo stroit. RSFSR, 1959. 33p. (MIRA 15:1)
(Blasting)
(Strip mining)

BR

ACCESSION NR: AT4030810 S/0000/63/000/000/0300/0308

AUTHOR: Presnov, V. A.; Rubashov, M. A.; Yakubenya, M. P.; Stroganova, V. V.; Ivleva, O. M.

TITLE: The physico-chemical nature of the formation of stable bonds between dissimilar substances

SOURCE: AN UkrSSR. Institut metallokeramiki i spetsial'ny*kh splavov. Poverkhnostny*ye yavleniya v rasplavakh i protsessakh poroshkovoy metallurgii (surface phenomena in liquid metals and processes in powder metallurgy). Kiev, Izd-vo AN UkrSSR, 1963, 300-308

TOPIC TAGS: glass, ceramics, metal, oxygen, oxide, acidity, alkalinity, rare earth element, alumina

ABSTRACT: The authors investigated the soldering of dissimilar substances such as glass, ceramics, and metal, and traced the historical basis of this research. Through a series of mathematical arguments they distributed the oxides of metals according to the increase of their acidic properties. The reaction of rare-earth element oxides La_2O_3 and Y_2O_3 with Al_2O_3 was studied and results were presented in tables. The mechanism for forming the complex compound, which leads to the origin of a

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ACCESSION NR: AT4030810

stable bond between dissimilar substances, was attributed to electron processes. With the approach of the oxides of aluminum and the rare-earth elements, suitable conditions arose before the donor-acceptor interaction. Atoms of aluminum oxide served as the acceptors and the atoms of the rare-earth oxides served as the donor. However, Al_2O_3 with B_2O_3 also yields a complex compound with aluminum oxide serving as the electron donor. Orig. art. has: 3 tables and 7 formulas.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut, Tomsk (Siberian Physical Engineering Institute)

SUBMITTED: 23Nov63 DATE ACQ: 16Apr64 ENCL: 00

SUB CODE: ML NO REF SOV: 008 OTHER: 001

Card 2/2

L 00709-66 EWA(h)/EWT(l)/EWT(m)/EWP(h)/T/EWP(t) IJP(c) JD/JG/GS

ACCESSION NR: AT5020467 UR/0000/64/000/000/0205/0218

AUTHOR: Vyatkin, A. P.; Ivleva, O. M.; Krasil'nikova, L. M.; Presnov, V. A. (Professor); Selivanov, B. A.; Yakubenya, M. P.

TITLE: Process of formation and structure of alloyed contacts of gallium arsenide with gold and silver

SOURCE: Mezhvuzovskaya nauchno-tekhnicheskaya konferentsiya po fizike poluprovodnikov (Poverkhnostnyye i kontaktnyye yavleniya). Tomsk, 1962. Poverkhnostnyye i kontaknyye yavleniya v poluprovodnikakh (Surface and contact phenomena in semiconductors). Tomsk, Izd-vo Tomskogo univ., 1964, 205-218

TOPIC TAGS: gallium arsenide, gold alloy, silver alloy, semiconductor research, semiconducting material

ABSTRACT: The authors study the process of formation, structure and some properties of fused gallium arsenide contacts with gold and silver. The melting points, coefficients of thermal expansion and microhardness of the various alloys formed at the semiconductor-metal contact were measured. Alloys of gallium arsenide with silver have a melting point of 750-760°C. The melting point of the gallium arsenide-gold alloy produced in a vacuum is 350-360°C, while that produced in an argon

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L 00709-65
ACCESSION NR: AT5020467

atmosphere is 575°C. This indicates that the composition of alloys of gallium arsenide with gold depends on the conditions under which the alloys are formed. Alloys with gold prepared in argon showed the least change in the coefficient of linear expansion. Alloys produced in vacuum have coefficients of linear expansion close to those of the pure metals. All the alloys differ considerably in their expansion coefficients from gallium arsenide, which may be the reason for the considerable thermal stresses which arise in alloyed contacts of gallium arsenide with gold and silver. Microhardness for all alloys is considerably lower than that of gallium arsenide. X-ray structural analysis shows that the gallium arsenide-silver contacts are composed of eutectic silver and polycrystalline GaAs. The interaction between gallium arsenide and gold in vacuum produces a chemical compound. The gallium arsenide-gold contact produced in argon gas is composed of eutectic gold and gallium arsenide. Contacts of gallium arsenide with gold and silver may be used as ohmic contacts. Orig. art. has: 7 figures, 3 tables.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitet im V. V. Kuybysheva (Siberian Physicotechnical Institute at the Tomsk State University)

SUBMITTED: 060ct64 ENCL: 00 SUB CODE: MM, SS

NO REF SOV: 010 OTHER: 000

Card 2/2

Ivleva, S. A.

USSR/ Physics - Photography

FD-1046

Card 1/1 : Pub. 153 - 17/23

Authors : Borin, A. V.; Makovskiy, A. P.; Odintsov, M. G.; Ivleva, S. A.; Avvakumov, V. I.

Title : Photographic material with constant value of the coefficient of contrast in the visible part of the spectrum.

Periodical : Zhur. tekh. fiz., 24, 1499-1502, Aug 1954

Abstract : Notes that photographic materials with constant coefficient of contrast independent of wave length are needed in solving a number of problems of spectral analysis and ostrophysics. Investigates the possibility of obtaining such materials. Concludes that the absolute magnitude of contrast varies but the character of the dependence of the contrast coefficient, gamma, on wave length remains unchanged. Eight references, 4 USSR (e.g. A. V. Borin, D. Ya. Martynov, T. I. Smolko, 1952; A. V. Barin, Z. I. Gratsianskaya, 1948).

Institution : --

Submitted : 1 November 1953

BORIN, A.V.; IVLEVA, S.A.

The synthesis of photographic emulsions using a continuous method. Zhur. nauch. i prikl. fot. i kin. 2 no.5:344-348 S-O '57.

(MIRA 10:11)

1. Fabrika kinoplenki, Kazan'.

(Photographic emulsions)

IVLEVA, V.P.; PSHONIK, A.T., nauchnyy rukovoditel', prof.

Interaction of unconditioned vascular, respiratory, and salivary reactions in healthy persons. Uch. zap. Kras. gos. ped. inst. 15:265-274 '59. (MIRA 14:12)

(Reflexes)

S/180/60/000/01/005/027
E071/E135

AUTHORS: Vigdorovich, V.N., Ivleva, V.S. and Krol', L.Ya. (Moscow)

TITLE: On the Purification of Antimony by the Method of Zonal Recrystallization

PERIODICAL: Izvestiya Akademii nauk SSSR,Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1960,Nr 1, pp 44-49 (USSR)

ABSTRACT: The results are given of an evaluation and classification of admixtures present in antimony from the point of view of the nature of their interaction with antimony. Furthermore, the results are reported of qualitative and quantitative analyses of the admixtures present in the starting and purified product. On the basis of analysis of available equilibrium diagrams characterising the interaction of antimony with corresponding admixtures, the latter were classified according to the ease with which they can be removed by zonal recrystallization. Admixtures of elements, the solubility of which in antimony in the solid state is low, are classified as easily removable. Admixtures of elements which are better soluble in solid antimony are considered as being

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On the Purification of Antimony by the Method of Zonal Recrystallization

difficult to remove and classified according to their partition coefficients (Fig 2). The behaviour of admixtures in antimony during zonal recrystallization was experimentally tested at various speeds of the melting zone: 4, 2 and 1 mm/min during 3, 5, 8, 10,15 and 20 passes. The width of the melting zone was 2 to 3 cm, the length of ingots 300 mm. The ingots were kept in graphite boats in an atmosphere of argon. The contents of As, Fe, Si, S and P were determined chemically; of other elements spectroscopically. A specially developed method combining chemical enrichment followed by spectroscopic analysis (no details given) was used for the determination of Pb, Cu, Ni, Co, In, Al and Cd. The method of radioactive analysis was used for Ni, Co, Tl, As (the method was developed by A.I. Kulak, Ref 13) and Mn, Se, Cu, Zn, Ga, As, P and Cr (the method was developed by E.Ye. Rakovskiy and Yu.V. Yakovlev). Flame photometry was used for the determination of Na, K and Ca. The method of radioactive isotopes was used for iron due to the fact that some of

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18.7500 1413 1555 S/180/60/000/006/006/030
E201/E335

AUTHORS: Vigdorovich, V.N. and Ivleva, V.S. (Moscow)

TITLE: An Approximate Method for Graphical Determination of the Effective Distribution Coefficients in Zone Recrystallisation

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1960, No. 6, pp. 51 - 55

TEXT: The paper begins with a brief survey of existing approximate methods (Ref. 1) of calculating the effective distribution coefficient (K) in purification by zone melting. The authors propose a graphical method for calculation of K, assuming perfect mixing in the molten zone, absence of diffusion equalisation in the solid phase, and independence of the distribution coefficient of temperature. These assumptions lead to

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An Approximate Method for Graphical Determination of the Effective Distribution Coefficients in Zone Recrystallisation

(here $a = \ell/b$). The point of intersection of the two functions given by Eqs. (6) and (7) gives the value of K; the two functions are shown in Figs. 1 and 2, respectively. The proposed method is illustrated by a calculation of the distribution coefficient of silver, silicon, manganese and chromium impurities in copper (Fig. 3 and Table 1), of copper, silver and nickel impurities in antimony (Fig. 4a and Table 2) and of lead, bismuth and tin impurities in antimony (Fig. 4b and Table 3). The continuous and dashed curves in Fig. 4 denote, respectively, zone recrystallisation with and without magnetic stirring. There are 4 figures, 3 tables and 5 references: 1 Soviet and 4 non-Soviet.

SUBMITTED: December 3, 1959

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S/180/61/000/002/004/012
E071/E435

AUTHORS: Vigdorovich, V.N., Ivleva, V.S. and Krol', L.Ya. (Moscow)

TITLE: On the Interaction of Admixtures During Zonal Recrystallization of Antimony

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1961, No.2, pp.72-76

TEXT: The problem of interaction of admixtures during purification of materials by recrystallization methods has been little studied. Therefore, the authors investigated the interaction of admixtures in the range of concentrations of 10^{-2} to 10^{-5} wt.% during zonal recrystallization of antimony. Two kinds of antimony, non-purified and purified by zonal recrystallization, were used for the experiment. Into the purified antimony additions of tin and bismuth, in the form of 4 to 5% alloys, were made. Samples were analysed for admixtures of copper, silver, nickel, iron, lead, tin, bismuth and arsenic by the spectroscopic method. The experiments were carried out in boats from purified graphite 300 mm long. The length of the

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molten zone was about 30 mm. The process of zonal recrystallization was carried out in an argon atmosphere at a velocity of 2 mm/min. The distribution of admixtures of tin and bismuth was studied after 10 and 20 passes. The initial content (wt.%) of admixtures is given in table 1 and the distribution of tin and bismuth along the length of the ingots (about 300 g) after zonal recrystallization is plotted in the figure. Although ingots with identical contents of tin and bismuth were not obtained (due to difficulties in precise alloying) yet the relative positions of the distribution curves indicate that the purification of ingot 1 containing about 0.2% of admixtures was more difficult than that of ingots 2 and 3 containing less admixtures (about 0.005%). Effective coefficients K of the distribution of tin and bismuth were calculated (Table 2). The calculation was done on the basis of analytical results obtained for the part of the ingot situated about 30 mm from the starting end (ℓ about 10% of the total length of the ingots). This part of the ingots was not affected by the dirty ends. After 10 passes there was no substantial difference in the effective distribution coefficients for tin in pure and contaminated

antimony, however, the difference appeared after 20 passes. In the case of bismuth, the difference in the effective distribution coefficients in pure and contaminated antimony was established after 10 passes; after 20 passes the removal of bismuth from the pure ingot was so effective that its content was beyond the sensitivity of the analytical method used (6×10^{-5} %), therefore the distribution coefficient was only roughly evaluated. It was established in a previous experimental work (Ref.6) on the purification of antimony from admixtures that lead, tin, bismuths and arsenic represent a group of admixtures which are the most difficult to remove. The results obtained in the present work confirmed this conclusion but they also indicated that the removal of tin and particularly bismuth is more difficult in the presence of other admixtures. In the discussion of results the following alternative explanations of the above phenomenon are offered:
a) Assuming a statistically uniform distribution of admixtures, the mean distance between atoms of admixtures in the impure metal would be about 3 to 4 and in the pure metal 300 to 350 Å. Thus in the first case the distances between atoms of the main admixture (Sn or Bi) are similar or larger than distances between

atoms of other admixtures. They are also similar to the distances of inter-atomic interaction. Apparently such a ratio of concentrations is beneficial (at least from kinetic considerations) for the appearance of interaction between the main and other admixtures. In the second case the mean distance between atoms of the main admixture is many times smaller than mean distances between other admixtures. Such a ratio of concentrations has less influence on the behaviour of the main admixture during zonal recrystallization. However, it is pointed out that changes of conditions of interaction of admixtures in the diffusion layer are difficult to evaluate. It is possible that during zonal recrystallization an accumulation of admixtures at the crystallization front takes place, whereupon the interaction between the main and other admixtures in this layer may appear earlier than it would be expected on the assumption of their uniform distribution.

b) The experimental data can also be explained on the basis of ideas on the peculiar conditions of crystallization acting in the immediate neighbourhood of the solidification front (Ref.8: Chalmers, B., J.Metals, 1954, v.6, S.1, No.5, pp.519-533).

It is possible that in the case of crystallization of impure antimony the conditions are more favourable for a more pronounced influence of concentration supercooling and, consequently, conditions for diffusionless crystallization acts are formed, causing irregularities in the solidification front and enclosures of the melt. This should lead to a deterioration in the effect of recrystallization separation, i.e. to values of the effective distribution coefficient closer to unity. B.A.Kolachev is mentioned for his contribution in this field. There are 1 figure, 3 tables and 8 references: 5 Soviet and 3 non-Soviet.

ASSOCIATION: Institut tsvetnykh metallov im. Kalinina "Giredmet" (Institute of Non-Ferrous Metals imeni Kalinin, "Giredmet")

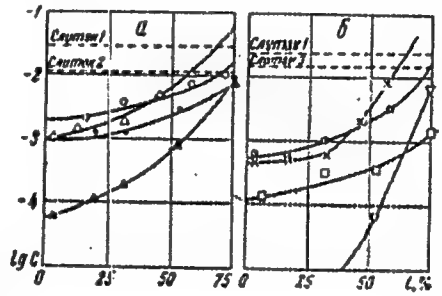
SUBMITTED: June 24, 1960

Figure. The distribution of admixtures Sn (Fig.a) and Bi (Fig.b) during zonal recrystallization of antimony.

Fig.a - after 10 passes (o - for ingot 1, ● - for ingot 2)
after 20 passes (Δ - for ingot 1, ▲ - for ingot 2)

Fig.b - after 10 passes (o - for ingot 1, □ - for ingot 3)
after 20 passes (x - for ingot 1, ▽ - for ingot 3)

broken lines indicate the corresponding levels of the starting concentrations of Sn and Bi in ingots.



слиток - ingot

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Table 1. Content of admixtures in ingots of antimony used for zonal recrystallization

1 - ingot No.
2 - Wt.% of admixtures

Таблица 1

Содержание примесей в слитках сурьмы, предназначенных для зонной перекристаллизации

Слиток	Содержание, вес. %							
	Cu	Ag	Ni	Fe	Pb	Sn	Bi	As
1	$3.2 \cdot 10^{-3}$	$3.4 \cdot 10^{-3}$	$2.3 \cdot 10^{-3}$	$7 \cdot 10^{-3}$	$3 \cdot 10^{-3}$	$2.7 \cdot 10^{-3}$	$2.4 \cdot 10^{-3}$	$1.3 \cdot 10^{-3}$
2	$9.0 \cdot 10^{-4}$	$3.0 \cdot 10^{-3}$	$1.7 \cdot 10^{-3}$	$6 \cdot 10^{-4}$	$1 \cdot 10^{-3}$	$1.1 \cdot 10^{-3}$	$7.0 \cdot 10^{-5}$	$5.0 \cdot 10^{-4}$
3	$8.0 \cdot 10^{-4}$	$4.0 \cdot 10^{-3}$	$1.6 \cdot 10^{-3}$	$6 \cdot 10^{-4}$	$8 \cdot 10^{-4}$	$2.0 \cdot 10^{-4}$	$1.4 \cdot 10^{-3}$	$5.0 \cdot 10^{-4}$

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E071/E435

Table 2. Effective coefficients of distribution K of admixtures during zonal recrystallization of antimony (for each admixture: top value - after 10 passes, bottom value - after 20 passes)

1 - admixtures
2 - K in ingots
3 - change in K, %

Таблица 2

Эффективные коэффициенты распределения K примесей при зонной перекристаллизации сурьмы*

Примесь	K в слитках			Изменение K, %
	1	2	3	
Sn	0.60 0.70	0.59 0.60	— —	1.7 16.7
Bi	0.50 0.65	— —	0.43 ~0.40	16.3 62.5

* Для каждой примеси верхняя строчка примеси —при 10 проходах зоны, нижняя—при 20.

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S/180/61/000/004/002/020
E073/E535

AUTHORS: Vigdorovich, V.N., Ivleva, V.S. and Krol', L.Ya. (Moscow)

TITLE: Distribution of admixtures of arsenic and selenium in the zone refining of antimony

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1961, No.4, pp.29-30

TEXT: In an earlier paper (Ref.1: Izv.AN SSSR, OTN, Metallurgiya i toplivo, 1960, No.1) the authors studied the behaviour of numerous admixtures in zone refining of antimony. In this paper further information is given on the behaviour of arsenic and selenium and the influence of initial concentration on the effectiveness of eliminating these elements during refining is studied. The initial material contained the following admixtures (%): Cu, Pb, Ni - 10^{-3} to 10^{-4}, Ag - 10^{-4} to 10^{-5}, Sn - 10^{-4}, Fe $\sim 10^{-3}$, Bi - 10^{-5}, Zn, In, Ga, Al $< 10^{-4}$, B $< 3 \cdot 10^{-5}$. Arsenic was introduced in the form of a 2% alloy. The ingots were 150 mm long and the length of the molten zone was 15 mm. After zone refining (10 passes at a speed of 2 mm/min), the ingot was cut

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longitudinally into four equal parts which were then crushed in a porcelain mortar, the powder was mixed and chemically analysed for arsenic content. The selenium was introduced in the form of the isotope Se^{75}. The experiments were carried out on ingots 280-300 mm long, with a molten zone of about 30 mm (10 passes at a speed of 2 mm/min). The obtained results are plotted in Figs.1 and 2, which give the logarithm of the concentration (lg C) of the admixed arsenic (Fig.1) and selenium (Fig.2) along the length of the antimony ingot ℓ; the dashed lines indicate the initial concentrations which, in %, amounted to: 1 - $6 \cdot 10^{-1}$, 2 - $8 \cdot 10^{-2}$, 3 - $9 \cdot 10^{-3}$ (Fig.1) and 1 - $2.5 \cdot 10^{-3}$, 2 - $7.5 \cdot 10^{-4}$, 3 - $4.5 \cdot 10^{-4}$ (Fig.2). The effective distribution coefficients were determined by an approximate graphical method and the obtained results were as follows: a) for arsenic: concentration $6 \cdot 10^{-1}$% - 0.82, $8 \cdot 10^{-2}$% - 0.78 and $9 \cdot 10^{-3}$% - 0.82; b) for selenium: concentration $2.5 \cdot 10^{-3}$% - 0.57, $7.5 \cdot 10^{-4}$% - 0.52, $4.5 \cdot 10^{-4}$% - 0.59. The distribution coefficient of arsenic ($K = 0.8 \pm 0.1$) is unfavourable from the point of view of purifying antimony; the value calculated from the phase diagram

is K_o = 0.64. The phase diagram of selenium and antimony is of the monotectic type and has a more favourable effective distribution coefficient (K = 0.55±0.10) from the point of view of zone refining. Within the concentration range of 10^{-1} to 10^{-4}% both admixtures have a constant distribution coefficient as far as could be judged from the sensitivity of the methods used. There are 2 figures and 6 references: 3 Soviet and 3 non-Soviet. The two English-language references read as follows: Ref.4: Thurmond, C.D., Struthers, J.D. J.Phys.Chem., 1953, v.57, p.831; Hansen, M., Anderko, K. Constitution of binary alloys. N.Y.-Toronto -London, 1958.

SUBMITTED: December 3, 1960

Card 3/4

L 06431-67 EWT(m)/EWP(t)/ETI LJP(c) JD/JG

ACC NR: AP6026708 SOURCE CODE: UR/0181/66/008/008/2472/2473

AUTHOR: Gulyayeva, A. S.; Ivleva, V. S.; Iglitsyn, M. I.

ORG: State Scientific Research and Design Institute of the Rare Metal Industry, Moscow (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskoy promyshlennosti)

TITLE: Lifetime of excess charge carriers in InSb single crystals with Ge and Au impurities

SOURCE: Fizika tverdogo tela, v. 8, no. 8, 1966, 2472-2473

TOPIC TAGS: indium compound, antimonide, carrier lifetime, recombination

ABSTRACT: The object of the work was to determine the effect of doping InSb single crystals with Ge and Au impurities on the recombination of excess carriers. p-Type samples were obtained from the original n-type material (electron concentration 10^{14} cm^{-3}) by this doping. The carrier lifetimes τ_n were measured at 77-300°K by stationary methods of measurement of the photomagnetic effect (τ_{pm}) and photoconductivity (τ_{pc}). The lifetime of electrons is inversely proportional to the concentration of traps. At 77°K, in samples doped with Ge, the quantity $\tau_n = \tau_{pm}$ changes by less than an order of magnitude as the Ge concentration increases by a factor of 200. This indicates that the recombination does not take place on Ge atoms. The lifetime data show that the Ge impurity does not affect the recombination of excess carriers. In the 77-170°K

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L 06631-67

ACC NR: AP6026708

range, the lifetimes in samples doped with Ge and Au are approximately the same. It is concluded that in this range, Ge and Au have no effect on the recombination of excess carriers, which takes place either on structural defects or on a residual impurity. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 31Jan66/ ORIG REF: 002/ OTH REF: 003

Card 2/2

IVLEVA, Ye.A., inzh.; GOFNER, A.M., kand.tekhn.nauk

Electrodes for fast welding. Svar.proizv. no.7:29-30 Jl '60. (MIRA 13:7)

1. Nauchno-issledovatel'skiy institut Ministerstva stroitel'stva RSFSR.
(Electric welding) (Electrodes)

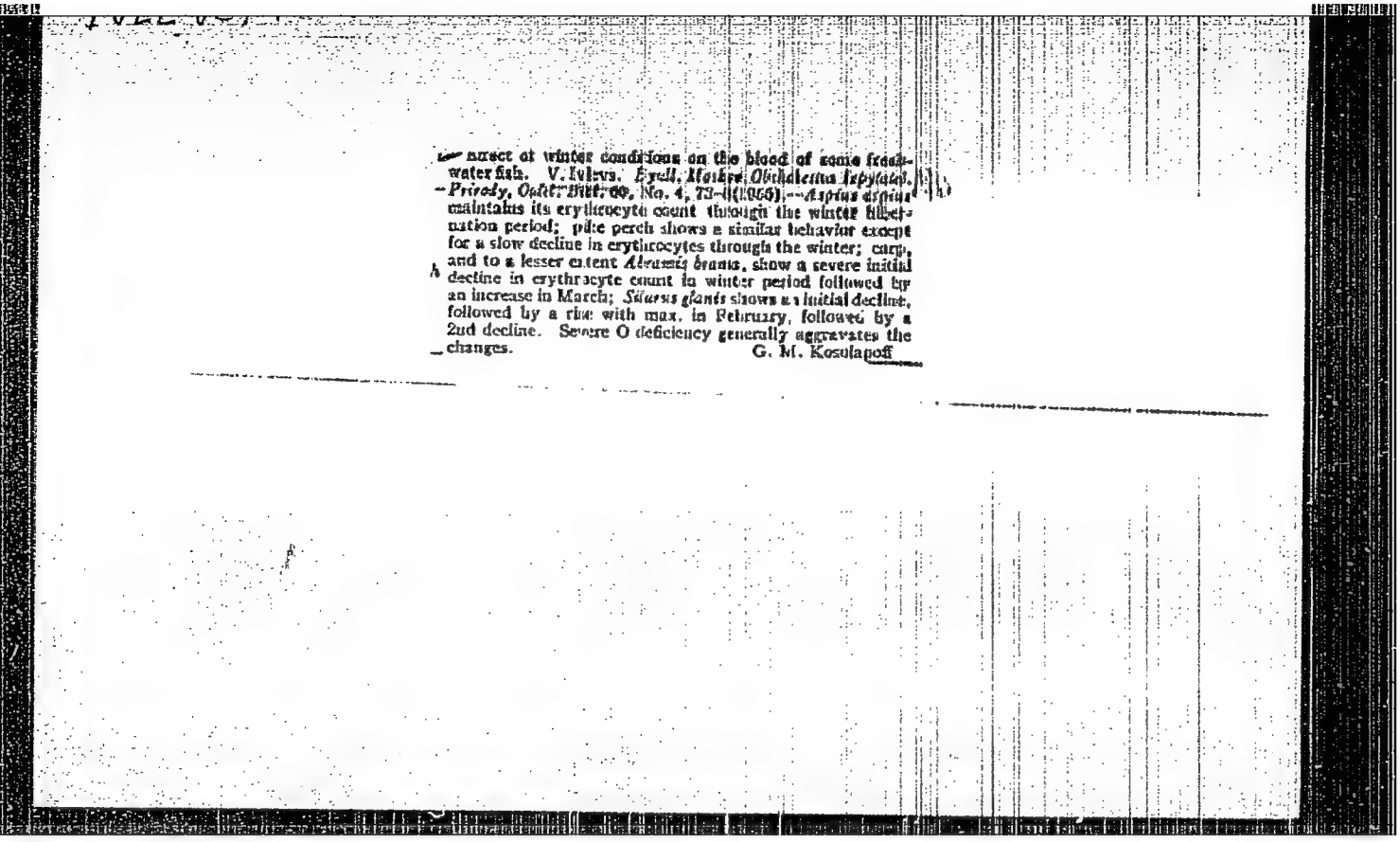
IVLEVA, Ye.S.

Problem of the effect of psychic phase of secretion on results of investigation of acidity of stomach contents. Terap.arkh. 29 no.4: 24-27 Ap '57. (MIRA 10:10)

1. Iz 1-go terapevticheskogo otdeleniya (nauchnyy rukovoditel' - prof. A.L.Vilkovyskiy) 4-y kafedry terapii (zav. - chlen-korrespondent AMN SSSR prof. P.I.Yegorov) TSentral'nogo instituta usovershenstvovaniya vrachey na baze TSentral'noy klinicheskoy bol'nitsy Ministerstva putey soobshcheniya.

(CONDITIONED, eff. of psychic phase of secretion on gastric acidity (Rus))

(GASTRIC JUICE, acidity, eff. of psychic phase of secretion (Rus))



aspect of winter conditions on the blood of some fresh-water fish. V. Iyiev. *Zyull. Moskov. Obshchestva Ispytatel. Prirody, Otdel. Biol.* 60, No. 4, 73–4(1955).—*Aspius aspius* maintains its erythrocyte count through the winter hibernation period; pike perch shows a similar behavior except for a slow decline in erythrocytes through the winter; carp, and to a lesser extent *Abramis brama*, show a severe initial decline in erythrocyte count in winter period followed by an increase in March; *Silurus glanis* shows an initial decline, followed by a rise with max. in February, followed by a 2nd decline. Severe O deficiency generally aggravates the changes.

G. M. Kosolapoff

IVLEYEV, A.P.

Experience in operating the equipment of 110 kv. substation.
Energetik 10 no.4:29-30 Ap '62. (MIRA 15:4)
(Electric substations)

BIDA, Ye.M., inzh.; IVLEYEV, A.P., inzh.; VESELOVSKIY, A.P., inzh.; POPOVNIN, M.G., inzh.

Use of transformer insulating oils in a municipal electric power distribution network. Elek. sta. 35 no.11:60-63 N '64.
(MIRA 18:1)

1. Sverdlovskaya gorodskaya elektroset' (for Bida). 2. Kuybyshevenergo (for Ivleyev). 3. Ivanovskaya kabel'naya set' (for Veselovskiy, Popovin).

AUTHORS: Ivlichev, Yu. I., Nadzhafov, E. M., (Moscow) SOV/103-19-11-1/10

TITLE: Universal Pneumatic Multiplication-Division Unit and Device for Automatic Square Rooting (Universal'noye pnevmaticheskoye mnozhitel'no-delitel'noye ustroystvo i ustroystvo dlya izvlecheniya kvadratnogo kornya)

PERIODICAL: Avtomatika i telemekhanika, 1958, Vol 19, Nr 11, pp 997 - 1009 (USSR)

ABSTRACT: Two devices are described here. They have been developed in the Laboratory for Pneumohydroautomation of the Institute for Automation and Telemechanics AS USSR. The multiplying and dividing device carried out the operation $P_4 = \frac{P_1 P_2}{P_3}$; P_4 - outlet pressure, P_1, P_2 and P_3 - inlet pressures. The multiplying and dividing block is described and in order to establish its static properties the equations of the processes which have taken place

Card 1/3

in the flow chambers as well as the equilibrium equations are derived for the forces on the rod. The static errors of the block are examined. The total relative static error is of 0,35%. The equation of the block dynamics is derived (31). From this it may be seen that the connections between the inlet and outlet pressures, even with the most simple model, are expressed by a complicated differential equation. A linear differential equation with constant factors is obtained only with P_1 = const and P_2 = const. Description of the Universal Device for square rooting follows, which operates in the same manner as the multiplication block taking into consideration the equation $P_3=P_4$. The static errors of this block are examined. The total relative static error is of 0.5%. The equation for the dynamics of this block (47) is derived. It is essentially non-linear. The results of the experimental examinations of both blocks are given. The tests proved that both show a specific rapid effect of 0.5 sec. From the examples given it may be seen that both blocks give exact results

up to the third stage. There are 6 figures and 3 Soviet references.

SUBMITTED: February 1, 1958

Card 3/3

PHASE I BOOK EXPLOITATION SOV/4671

Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki. Seminar po pnevmogidravlicheskoy avtomatike. 2d and 3d session

Voprosy pnevmo- i gidro- avtomatiki (Problems in Pneumatic and Hydraulic Automation) Moscow, 1960. 211 p. Errata slip inserted. 4,500 copies printed.

Resp. Ed.: M.A. Ayzerman, Doctor of Technical Sciences, Professor; Ed. of Publishing House: A.A. Tal'; Tech. Ed.: S.G. Tikhomirova.

PURPOSE: This collection of articles is intended for scientific workers, industrial designers and engineers interested in automation and telemechanics.

COVERAGE: The collection of 23 articles is a continuation of an earlier work of the Academy of Sciences USSR, on pneumatic and hydraulic automation systems, published in 1959. A wide range of problems connected with the design and operation of pneumatic and hydraulic automation equipment is described. An addition to problems based on experiments, the collection also contains discussions of new trends in the field, such as the possibility of using very low pressure for the operation of pneumatic devices. Some articles of this collection were written in the German Democratic Republic and in Czechoslovakia and reflect a somewhat different approach to automation problems. No personalities are mentioned. References accompany most of the articles.

PNEUMATIC AND HYDRAULIC DEVICES AND SYSTEMS OF AUTOMATIC REGULATION

PNEUMATIC COMPUTING-SOLVING AND SCANNING DEVICES

PNEUMATIC AND HYDRAULIC AUTOMATION DEVICES
IN
THE GERMAN DEMOCRATIC REPUBLIC AND CZECHOSLOVAKIA

AVAILABLE: Library of Congress (TJ840.S42)

Card 5/5

AC/dmm/gmp
1-12-61

27

S/119/60/000/06/04/016
B014/B014

AUTHOR: Ivlichev, Yu. I., Engineer

TITLE: Summation of Pressures in a Pneumatic Chamber With a Compensating Choke

PERIODICAL: Priborostroyeniye, 1960, No. 6, pp. 9-12

TEXT: By way of introduction, the author describes the drawbacks of pneumatic diaphragm summators (Fig. 1) which may be replaced by other types based on the utilization of the interrelationship between the flows in a flow chamber (Fig. 2). The accuracy obtained with these summators is not very high, and is limited by the application of low pressure. In the present paper it is shown that an accuracy sufficient for practical purposes can be warranted by the use of a choke permitting a constant flow out of the chamber (Fig. 2). In studying the static properties of the summator the author proceeds from the assumption that the linear dependence of the rate of discharge does not depend on the flow direction. Formula (2) is derived for the pressure in the chamber. Next, the author gives a detailed description of the method used to raise the

Card 1/2

S/119/61/000/002/003/011
B116/B203

AUTHOR: Ivlichev, Yu. I.

TITLE: Matrix representation of pneumatic schemes

PERIODICAL: Priborostroyeniye, no. 2, 1961, 8-9

TEXT: Differential equations or transfer functions are usually employed for investigations of pneumatic schemes. Resulting difficulties can be reduced by seeking a linear solution under linear conditions, and particularly by using the matrix calculus for these purposes. The matrices permit the required solutions to be fixed and, in the case of a unique solution, repeated intermediate conversions to be excluded. The principal advantage of the matrix representation consists in the possibility of multiplying chains of any elements. A pneumatic scheme of any complicacy can be regarded as an element which, with maintenance of the basic properties, may be simplified or complicated. Another property in this respect is that the following four parameters of an element can be brought into agreement: pressure P_1 and quantity G_1 at the input, as well as pressure P_2 and quantity G_2 at the output. This fact is not affected by any change in structure. The problem

Card 1/4

Matrix representation ...

posed is considered to be linearly dynamic, and the following relation is established between the four parameters:

$$\left.\begin{aligned} P_1(S) &= A_{11}(S)\,P_2(S) + A_{12}(S)\,G_2(S) \\ G_1(S) &= A_{21}(S)\,P_2(S) + A_{22}(S)\,G_2(S) \end{aligned}\right\} \quad (1),$$

where S is the operator argument, A are the operators or numbers. Equations (1) correspond to the square matrix 2 by 2:

$$A(S) = \begin{pmatrix} A_{11}(S) & A_{12}(S) \\ A_{12}(S) & A_{22}(S) \end{pmatrix} \quad (2).$$

This matrix entirely expresses the properties of the element by its coefficients. Therefore, a complicated form of the element obtained by the composition of elements may be regarded as a product of matrices

$$A(S) = \prod_{1}^{n} A_k(S) \quad (3),$$

where A_k is the matrix of the individual elements, and A the resulting matrix

leading to the new element. A table shows the matrices of the pneumatic elements determined in this way. Further, it is shown that the matrix of the element also contains its transfer function. If this function is regarded as the ratio of the operator of the output value to the operator of the input value (with respect to the pressures), the following is obtained from (1) on the assumption of $G_2 = 0$:

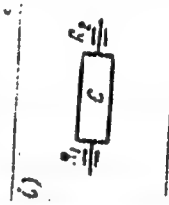
$$\frac{P_2(S)}{P_1(S)} = \frac{1}{A_{11}(S)} \qquad (9).$$

Hence, it follows that the pressure transfer function of the pneumatic element is determined by the first coefficient of its matrix. There are 1 figure, 1 table, and 2 Soviet-bloc references.

Matrix representation ...

S/119/61/000/002/003/011
B116/B203

Legend to the table: Table of matrices of pneumatic basic elements. Left-hand column: diagram, right-hand column: matrix. R is the choke resistance, $C = V/R_gT$ is the pneumatic capacity (V is the chamber volume, R_g the gas constant, and T the absolute temperature).

1) 	$\begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$
2) 	$\begin{pmatrix} 1 & R \\ 0 & 1 \end{pmatrix}$
3) 	$\begin{pmatrix} 1 & 0 \\ -\frac{1}{K} & 1 \end{pmatrix}$
4) 	$\begin{pmatrix} 1 & 0 \\ CS & 1 \end{pmatrix}$
5) 	$\begin{pmatrix} 1+RCS & R \\ CS & 1 \end{pmatrix}$
6) 	$\begin{pmatrix} \frac{R_1+R_2+R_1R_2CS}{R_2} & R_1 \\ \frac{1+R_2CS}{R_2} & 1 \end{pmatrix}$
7) 	$\begin{pmatrix} \frac{1}{K} & 0 \\ 0 & 0 \end{pmatrix}$

Card 4/4

24760

26.2190

S/119/61/000/007/004/008
D247/D306

AUTHORS: Ivlichev, Yu.I., and Ismiyev, E.A.

TITLE: A new principle of gas flow measuring

PERIODICAL: Priborostroyeniye, no. 7, 1961, 14 - 15

TEXT: This paper describes the construction, operation and presents the substantiation of the principle of a new gas flowmeter. The principle is based on the balance of flow through two throttles one of which has the same pressure as the throttle plate. Fig. 1 represents a schematic diagram of the flowmeter. It has a pneumatic follow-up system with a diaphragm D separating two chambers. One chamber is joined to the main pipe (pressure P_1) on the left of the throttle plate Th.P via a throttle Th_1. The other chamber has a direct connection to the other side of the throttle plate (pressure P_2). The first chamber has an outlet to pressure P_3 via the nozzle N, and with a gas exhaust pipe via throttle Th_2. The system works as follows: due to the flow of gas in the pipe of a differential pressure $P_1 - P_2$ is set up across

Card 1/4

the throttle plate. The same pressure difference exists across the throttle Th_1 owing to the action of the follow-up system. Thus $P_x = P_2$. As the result of pressure difference across the throttle Th_1 a flow of gas takes place through the throttle Th_2. Therefore, the flow of gas through Th_1 can be determined from the magnitude of pressure P_3 in the chamber K. Consequently the pressure P_3 becomes the measure of gas flow through the throttle plate if the temperature compensation is provided. The compensation can be achieved either by maintaining the gas flowing through the throttle plate and through the throttle Th_1 at equal temperatures and the gas flowing through Th_2 at a constant temperature, or by providing temperature compensation of the gas flow through Th_2. The latter method is simpler. It is obtained by making the flap Fl of brass and the body of Th_2 of steel. An adjustable ring Rg provides the correct temperature compensation for various settings of the throttle. Full mathematical proof of the principle is given, the author arriving at the equation of

A new principle of gas flow...

flow through Th_2 (8),

$$G_3 = \frac{(P_3 - P_a) P_a}{a_4},$$

where P_a - atmospheric pressure and $a_4 = C_2 T_3$ where T_3 - absolute temperature of gas passing through Th_2, C_2 - throttle constant. Considering the excessive pressures with $G_2 = G_3$, $P_3 - P_a = C \frac{P_2}{F_1}$ $T_3 G$, where $C = \frac{C_1 C_2}{P_a}$. This means that the flow in the pipe can be measured by means of the excessive pressure $P_3 - P_a$, if the temperature of gas flowing through Th_2 is constant, or if the flow G_3 is temperature-compensated. This principle of flow measurement is also applicable to liquids. According to calculations, the flow through the instrument represents only 10^{-8} of the main flow through a pipe of 1 m in diameter. It can be proved that the above principle of flow measurement complies with the requirements laid down in the rules of the Komitet standardov, mer i izmeritel'nykh priborov (Committee of Standards, Measures and

Card 3/ 4

A new principle of gas flow...

Measuring Instruments). There are 2 figures.

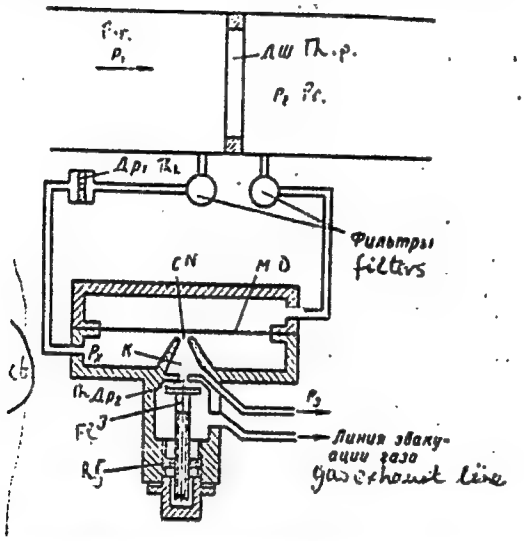


Fig. 1

Card 4/4

26957
S/019/61/000/012/070/121
A152/A128

26.2191

AUTHORS: Ivlichev, Yu.I., and Ismiyev, E.A.

TITLE: A liquid or gas expenditure transmitter

PERIODICAL: Byulleten' izobreteniy, no. 12, 1961, 46

TEXT: Class 42e, 23_{20}. No. 139098 (680315/26 of September 27, 1960). 1. Liquid or gas expenditure transmitter determining the expenditure by the pressure gradient, differing from others in that for the purpose of increasing the accuracy of measurement and simplifying the structural design, it is made up of two chambers devided by a membrane; one chamber is connected through a turbulent gate valve to the pipeline above the throttle disc, while the other is connected with the pipeline at a point beyond the throttle disc, and a thermostat for the maintenance of a constant temperature in the flow coming through a follow-up nozzle into the flow section with a linear throttle. 2. In this variant the body and the nozzle of the linear throttle are made from a material having a different linear expansion coefficient.

Card 1/1

IVLICHEV, Yu.I.

Matrix transfer functions. Priborostroenie no.2:8-10 F '62.
(MIRA 15:2)
(Matrices)

26.2190 (2423)

40273

S/019/62/000/015/029/039
A154/A126

AUTHOR: Ivlichev, Yu.I.

TITLE: A pneumatic adder

PERIODICAL: Byulleten' izobreteniy, no. 15, 1962, 45

TEXT: Class 42m, 15. No. 149269 (753530/26-24 of November 27, 1961). This pneumatic adder is built around a flow-through chamber between throttles. To increase the accuracy of the addition, a servo system is connected to the outlet of the flow-through chamber to keep the pressure in the latter constant. Another flow-through chamber with a linear throttle communicating with the atmosphere is connected to the outlet of the servo system.

[Abstracter's note: Complete translation]

Card 1/1

L 17888-63 EPR/EWG(s)-2/EWT(1)/BDS/ES(v) AFFTC/ASD/APGC Ps-4/
Pw-4/Pe-4 WW
ACCESSION NR: AP3004281 S/0119/63/000/007/0006/0009

70

AUTHOR: Ivlichev, Yu. I.; Ismiyev, E. A.

TITLE: Reducing jet reaction on the controlling element

SOURCE: Priborostroyeniye, no. 7, 1963, 6-9

TOPIC TAGS: hydraulic automatic system, pneumatic automatic system

ABSTRACT: Numerous experiments have shown that reducing the reaction in the jet-type controlling elements determines the quality of their operation. The article considers theoretically the reactive forces involved and offers an improved design where a special jet bushing is used instead of the usual jet nozzle. The theory is developed for a fluid and, hence, is claimed to be equally applicable to both liquid and gas media. The new design was experimentally verified with these results: (1) its static characteristics were not distorted when the controlling power was halved; (2) its dynamic characteristics were as

Card 1/2

L 17888-63
ACCESSION NR: AP3004281

good as those of the usual jet nozzle. Orig. art. has: 3 figures and 18 formulas.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 08Aug63 ENCL: 00

SUB CODE: IE NO REF SOV: 007 OTHER: 000

Card 2/2

L 19881-63 EWT(d)/EDS
ACCESSION NR: AP3007291 S/0119/63/000/009/0008/0010

AUTHOR: Ivlichev, Yu. I.

TITLE: Static and dynamic linearization of pneumatic assemblies

SOURCE: Priborostroyeniye, no. 9, 1963, 8-10

TOPIC TAGS: linearization, static linearization, dynamic linearization, pneumatic device

ABSTRACT: The problem of linearization of throttle-type schemes is solved for purposes of developing analog pneumatic devices (measuring, controlling, computing) which could be directly connected to pneumatic or hydraulic final-control mechanisms. A simple throttle assembly is described mathematically assuming the conductances nonlinear and the nonlinear rate-of-flow obeying the Poiseuille formula. Simple mathematical operations result in an algorithm that describes a different scheme in which constant-pressure linear throttles are used and a

Card 1/2

L 19881-63

ACCESSION NR: AP3007291

unidirectional flow is ensured. The same method is extended over two throttle-type assemblies that can yield differential relations. Both schemes, linear statically and dynamically, can be materialized by means of throttles, simple followers, and pneumorelays. It is recommended that the constant pressure be 0.2 kg/cm^2; the suggested pressure upper limit is 1 kg/cm^2. Orig. art. has: 2 figures and 12 formulas.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 07Oct63 ENCL: 00

SUB CODE: IE NO REF SOV: 006 OTHER: 000

Card 2/2

USSR

L 261-64 BDS MLK(a)

ACCESSION NR: AP3007657 S/0286/63/000/011/0066/0066

AUTHOR: Ivlichev, Yu. I.; Ismiyev, E. A. O. B

TITLE: Pneumatic vibration generator. Class 42, No. 155048

SOURCE: Byul. izobret. i tovarn. znakov, no. 11, 1963, 66

TOPIC TAGS: pneumatic vibration generator, vibration generator, serrate vibration, pneumatic vibrator, vibration generation

ABSTRACT: The patent introduces a vibration generator producing serrate-type vibrations of air or fluid pressure (Fig. 1 of the Enclosure). It contains a chamber with a spring-loaded diaphragm connected through a variable throttle with a source of constant pressure and, through a nozzle, with a constant-volume chamber. The latter chamber is connected through a valve with a third chamber which has a spring-loaded diaphragm and a variable throttle opening to the atmosphere. Orig. art. has: 1 figure.

ASSOCIATION: none

Card 1/3

L 261-64
ACCESSION NR: AP3007657

SUBMITTED: 27Nov63 DATE ACQ: 160ct63 ENCL: 01

SUB CODE: SD NO REF SOV: 000 OTHER: 000

Card 2/ 3

L 261-64

ACCESSION NR: AP3007657

ENCLOSURE: 01

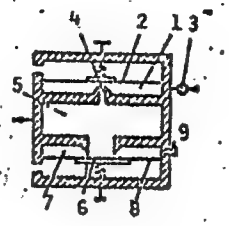


Fig. 1. Pneumatic vibration generator

1 - Chamber; 2 - spring-loaded diaphragm; 3 - variable throttle; 4 - nozzle; 5 - constant-volume chamber; 6 - valve; 7 - chamber; 8 - spring-loaded diaphragm; 9 - variable throttle.

Card 3/3

USSR

ACCESSION NR: AP4001599 S/0286/63/000/016/0078/0078

AUTHOR: Ivlichev, Yu. I.; Ismiyev, E. A.

TITLE: Pneumatic vibration generator. Class 42, no. 156776

SOURCE: Byul. izobret. i tovarn. znakov, no. 16, 1963, 78

TOPIC TAGS: pneumatic vibration generator, pressure oscillation, vibration generator, vibration

ABSTRACT: A pneumatic vibration generator containing a regulating valve connected to a constant pressure source. This valve is connected to reversing valves and to a chamber provided with a thick membrane. The distinguishing feature is that of obtaining relaxation oscillations rigidly related to each other in phase and rectangular oscillations. A triple-throttle valve is used as a regulating valve. This valve is rigidly connected to a membrane and is provided with a chamber open to the atmosphere. It is also connected through pneumatic throttles and incident-parallel switching reversing valves to a chamber provided with a flexible membrane.

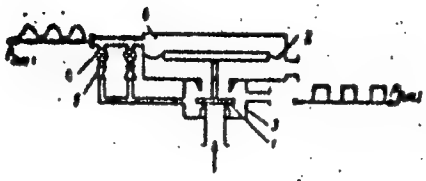
ASSOCIATION: none

SUBMITTED: 30Oct62 DATE ACQ: 02Dec63 ENCL: 01

SUB CODE: SD NO REF SOV: 000 OTHER: 000

Card 1/2

ACCESSION NR: AP4001599 ENCLOSURE: 01



1 - regulating valve; 2 - membrane; 3 - valve chamber; 4 - pneumatic throttles; 5 - reversing valves; 6 - membrane chamber

Card 2/2

IVLICHEV, Yu.I.

Geometrical parameters of linear pneumatic chokes. Priborostroenie no.11:15-16 N '63. (MIRA 16:12)

ACCESSION NR: AP4042897 S/0119/64/000/007/0001/0005

AUTHOR: Ivlichev, Yu. I. (Candidate of technical sciences); Ismiyev, E. A. (Engineer)

TITLE: Universal pneumatic oscillator

SOURCE: Priborostroyeniye, no. 7, 1964, 1-5

TOPIC TAGS: oscillator, pneumatic oscillator, pressure oscillation, square waves, sawtooth waves

ABSTRACT: A laboratory-type pneumatic oscillator which generates cophasal and synchronous sawtooth and square oscillations is described. The oscillator is based on a two-seat pneumatic valve whose stem is fastened to diaphragm 8 (see Enclosure 1) which is part of chamber 5. The diaphragm vibrates, establishing sort of relaxation oscillations in chamber 5 while almost square oscillations are produced in chamber 4. A design drawing and formulas for the oscillator are

Card 1/3

ACCESSION NR: AP4042897

supplied. A laboratory model was tested at industrial-pneumatic-device pressures and also at elevated pressures up to 3 atm. Wave shapes were recorded (by manometers) at 0.16—0.365 cps; at lower frequencies, the sides of the sawtooth were near-exponential, and the trailing edge of the square pulse was beveled; at higher frequencies, the wave shapes were better. Frequencies up to a few dozen cps were attained. A 0.04-mm-thick vinyl-chloride diaphragm withstood 17 million cycles during laboratory tests. Orig. art. has: 4 figures and 15 formulas.

ASSOCIATION: none

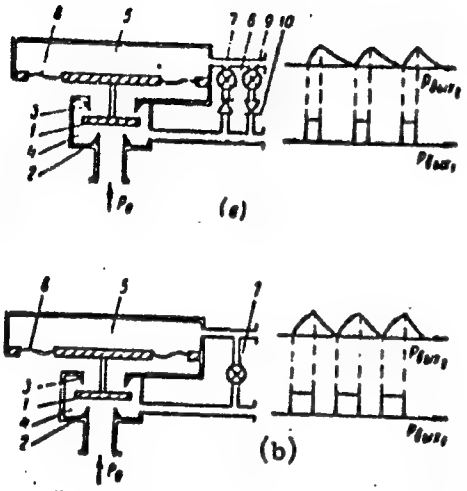
SUBMITTED: 00 ENCL: 01

SUB CODE: EC NO REF SOV: 006 OTHER: 001

Card 2/3

ACCESSION NR: AP4042897

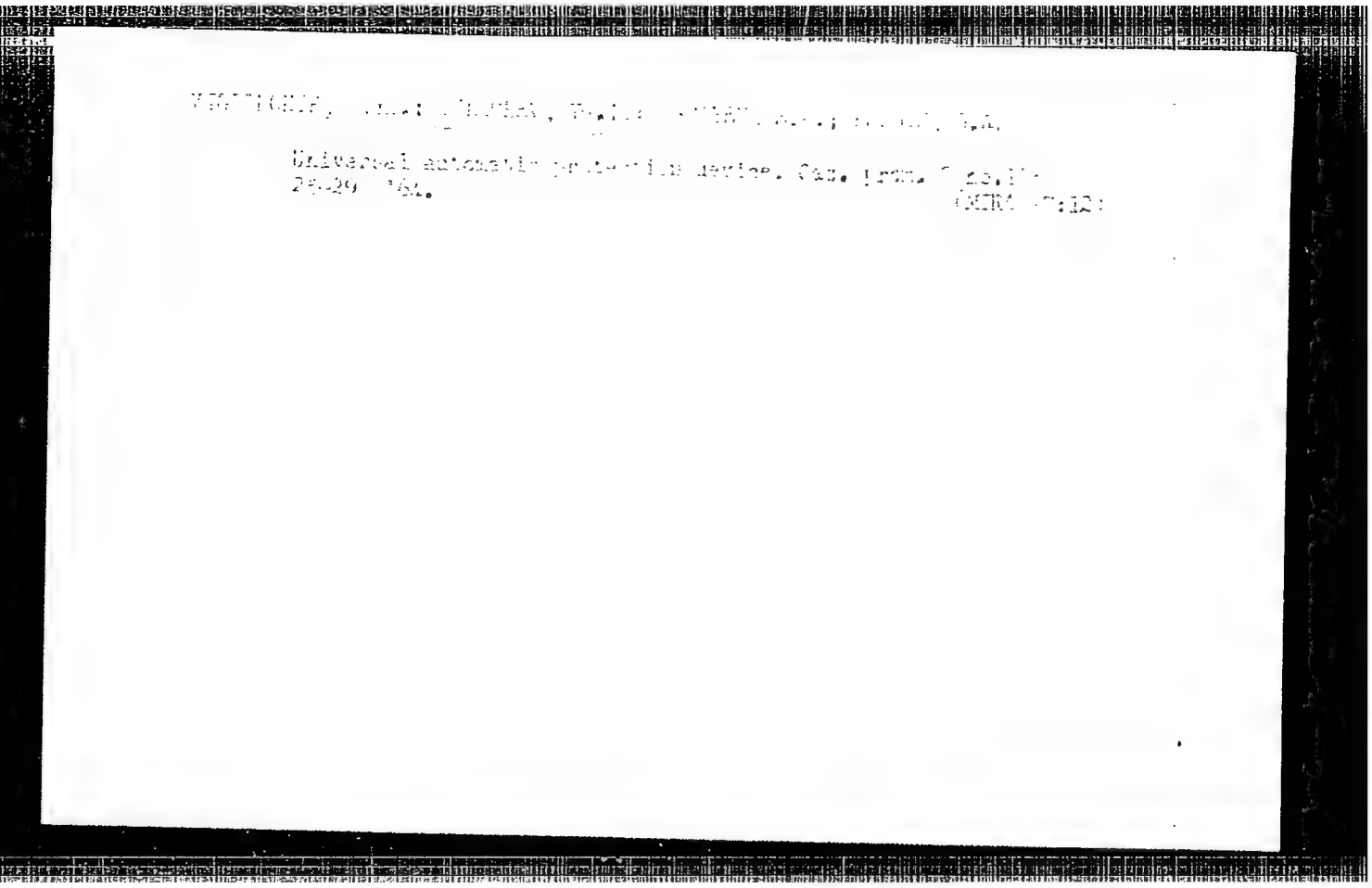
ENCLOSURE: 01



Pneumatic oscillators: (a) universal, (b) simplified

1 - valve
2 - lower valve seat
3 - upper valve seat
4 - square-pulse chamber
5 - sawtooth-pulse chamber
6 - 10- pneumatic detector (valve)
7 - 9 - throttle
8 - vinyl-chloride diaphragm

Card 3/3



IVLICHEV, Yu.I., kand.tekhn.nauk

Gas and hydrodynamic functions and the circle diagram. Priborostroenie no.6:9-11 Je '65. (MIRA 28:7)

IVLIYEV, A.; TELEGIN, M.

Victory of Ufa drivers. Za rul. 17 no.11:10-12 N '59.
(MIRA 13:4)

1. Predsedatel' Soyuz sportivnykh obshchestv i organizatsiy Bashkirskoy ASSR (for Ivliyev). 2. Spetsial'nyy korrespondent zhurnala "Za rulem" (for Telegin).
(Motorcycle racing)

[redacted], Alexey [redacted]

[redacted] methodological directions concerning the operational and economic basis of prospective vessel types for river transportation. Trudy [redacted] no.(515)-14 '64. (MIRA 18:10)

[illegible], . . [illegible].

Pruzhinnye instrumenty i prisposobleniia [Spring tools and attachments]. Moskva, Rosgizmestprom, 1952. 40 p.

SO: Monthly List of Russian Accessions, Vol 6 No 4, July 1953

IVLIYEV, I., direktor-polkovnik administrativnoy sluzhby.

Potentialities for the lowering of costs in transportation in the new five-year plan. Zhel. dor. transp. no.1:22-30 '47.
(MIRA 13:2)

(Railroads--Cost of operation)

IVLIYEV, I.

Business accounting in railroad transportation. Vop. ekon. no.10: 36-48 O '56. (MLRA 9:11)

(Railroads--Accounting)

SOV/81-59-5-17509

Translation from: Referativnyy zhurnal, Khimiya, 1959, Nr 5, p 528 (USSR)

AUTHORS: Shreyber, V.N., Ivliyev, I.N.

TITLE: Modern Plastic Materials Used in Radio-Engineering

PERIODICAL: Za tekhn. progress (Sovnarkhoz Gor'kovsk. ekon. adm. r-na), 1958, Nr 5, pp 23 - 27

ABSTRACT: The main properties and the fields of application of thermoplastic and thermo-reactive insulating plastics, polyamide resins, glass textolites, epoxide resins and epoxide-polyester compounds are listed, as well as thermoreactive MEK compounds after hardening.

A. Vavilova

Card 1/1

BIRMAN, A.M., doktor ekonom.nauk; BRAZOVSKAYA, T.I.; BELOUSOVICH, S.N.; VESELKOV, F.S.; KATSENELENBAUM, Z.S.; IVLIYEV, I.V.; SEMENOV, I.Ya.; YAKOVLEV, M.S.; LAYKHTMAN, R.I.; GOFMAN, G.A.; SHUMOV, N.S.; VINOKUR, R.D., dotsent; TATSIY, G.M., red.; KONDRAT'YEVA, A., red.; TELEGINA, T., tekhn.red.

[Finances of enterprises and branches of the national economy] Finansy predpriiatii i otraslei narodnogo khoziaistva. Avtorskii kollektiv pod rukovodstvom A.M.Birmana. Moskva, Gosfinizdat, 1960. 576 p. (MIRA 14:3)

1. Moskovskiy finansovyy institut (for Vinokur).
(Finance)

IVLIEV, I. V.

Osnovnye cherty plana pervogo goda vtoroi piatiletki zheleznodorozhnogo transporta. /The main feature of the plan for the first year of the second five-year plan for railroad transportation/. (Sots. transport, 1933, no. 1-2, p. 39-48).

DLC: HE7.S6

SO: Soviet Transportation and Communication, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified.

IVLIEV, I. V.

K voprosu o planirovanii na zheleznodorozhnom transporte. [On the question of planning in railroad transportation]. (Sots. transport, 1933, no. 5-6, p. 89-107).
DLC: HE7.S6

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

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